Amendments to the Claims:

1.   (Currently amended) A device for multiplexing of data comprising
a first multiplexer having

first live signal inputs for signals transmitted live and/or first bitrate inputs for which
appropriate bitrate needs to be maintained and/or first weight inputs with priorities defined by
a weight coefficient,

a first output, and

modules connected to ~~said~~ the first live signal inputs, the first bitrate inputs and the
first weight inputs for receiving packet request commands which request reading of packets
at ~~said~~ the first live signal inputs, the first bitrate inputs and the first weight inputs and
sending the packets to the first output wherein the multiplexer merges ~~signals~~ packets from
~~said~~ the first live signal inputs, the first bitrate inputs and the first weight inputs into a first
single stream fed at the first output wherein packets from the first live signal inputs are sent
to the first output immediately after appearance at the first live signal inputs and packets
from the first bitrate inputs are sent when no packet is available at the first live signal inputs
and packets from the first weight inputs are sent when no packet is available at the first
bitrate inputs and the first live signal inputs, and wherein the ~~said~~ first live signal inputs, the
first bitrate inputs and the first weight inputs are buffered.

2.   (Original) The device for multiplexing according to claim 1 wherein the weight
coefficient is a number from 0 to n defining a rate at which data is read from each input of
the first weight inputs and showing how many times more often will the data be read from a
given first weight input, as compared with a first weight input of the lowest priority, equaling
1.

3-4.   (Canceled)

5.   (Currently amended) The device for multiplexing according to claim 1 wherein data appearing at the first bitrate inputs is read with a ~~specific~~ bitrate defined by a number larger than 0.

6.   (Currently amended) The device for multiplexing according to claim 1 further comprising

a second multiplexer having

second live signal inputs for signals transmitted live and/or second bitrate inputs for which appropriate bitrate needs to be maintained and/or second weight inputs with priorities defined by the weight coefficient, where one of ~~said second multiplexer~~ the second live signal inputs, the second bitrate inputs and second weight inputs is linked to the first output of the first multiplexer,

a second output and

modules connected to ~~said second multiplexer~~ the second live signal inputs, the second bitrate inputs and second weight inputs for receiving packet request commands which request reading of packets at ~~said second~~ the second live signal inputs, the second bitrate inputs and second weight inputs and sending the packets to the second output wherein the second multiplexer merges the ~~signals~~ packets from ~~said second~~ the second live signal inputs, the second bitrate inputs and second weight inputs into a second single stream fed at the second output and wherein ~~said second~~ the second live signal inputs, the second bitrate inputs and second weight inputs are buffered.

7.   (Original) A method for multiplexing of data in a system for dataflow management using multiplexers comprising

receiving by a multiplexer a request for a packet;

checking if any live signal inputs are connected to the multiplexer;

initiating a procedure of reading packets from the live signal inputs and checking if a packet is available;

reading and sending a found packet to an output when the packet was available until all live signal inputs are checked and packets are sent;

checking if any bitrate inputs are connected to the multiplexer;

checking if a sum of bitrates of the bitrate inputs is smaller than a bitrate of a multiplexer output;

initiating a procedure of checking for packets using bitrate when the bitrate inputs are found available and the sum of the bitrates of the bitrate inputs is smaller than the bitrate of the multiplexer output and sending found packets until all packets are sent;

treating the bitrates of the bitrates inputs as weight coefficients when the sum of the bitrates of the bitrates inputs is greater than the bitrate of the output and treating the bitrates inputs as weight inputs;

initiating a procedure of searching for packets at the weight inputs when the weight inputs are found available and sending found packets until all packets are sent;

sending information about packet unavailability when no packets are available; and

waiting for the request for a packet.